

WHAT IS CLAIMED

1. A method comprising the steps of:

- a) subjecting a test site of a responsive system to a primary challenge;
 b) subjecting the test site to a secondary challenge, wherein the secondary challenge differs from the primary challenge and wherein the secondary challenge is designed to enhance, and/or prolong a response of the responsive system to the primary challenge;
 and
 c) assessing the response.

2. The method according to Claim 1 wherein the secondary challenge comprises a chemical challenge.

The method according to Claim 2 wherein the primary challenge is selected from the group consisting of physical challenges, chemical challenges, and biological challenges.

4. The method according to Claim 1 wherein the primary challenge comprises a physical challenge, and the secondary challenge comprises a physical challenge.

5. The method according to Claim 1 further comprising the steps of subjecting the test site to at least one pre-challenge intervention.

6. The method according to Claim 1 further comprising the steps of subjecting the test site to at least one intervention selected from the group consisting of concurrent-challenge intervention, post-challenge intervention, and mixtures thereof.

7. The method according to Claim 1 wherein assessing the response comprises a visual and/or TEWL measurement.

8. A study comprising the steps of:

- a) applying a primary challenge to a test site of a responsive system; applying a secondary challenge to the test site, wherein the secondary challenge differs from the primary challenge and wherein the secondary challenge is designed to enhance and/or prolong a response of the responsive system to the primary challenge; and

mg10 7 b) creating one or more controls selected from the group consisting of negative controls, primary controls, secondary controls, positive controls, and mixtures thereof.

9. The study according to Claim 8 comprising the additional steps of assessing a primary challenge response subsequent to the primary challenge and prior to the secondary challenge; assessing one or more secondary challenge responses one or more times after the secondary challenge; and assessing one or more control responses to the controls at the same approximate times as the primary challenge assessment and secondary challenge assessments are made; and drawing conclusions based upon the assessments.

10. The study according to Claim 8 comprising at least one additional step comprising subjecting the test site and/or one or more controls to at least one pre-challenge intervention.

11. The study according to Claim 8 comprising at least one additional step selected from the group consisting of subjecting the test site and/or one or more controls to at least one concurrent-challenge intervention, and/or subjecting the test site and/or the one or more controls to at least one post-challenge intervention.

12. A method comprising the steps of:

- a) subjecting a test site of a responsive system to a primary challenge, wherein the primary challenge comprises a chemical and/or biological challenge; and
- b) subjecting the test site to a secondary challenge, wherein the secondary challenge comprises a physical challenge and wherein the secondary challenge is designed to enhance and/or prolong a response of the responsive system to the primary challenge; and
- c) assessing the response.

13. A method according to Claim 12 wherein the secondary challenge is tape-stripping.

14. The method according to Claim 12 wherein the primary challenge comprises more than one component and/or step.

Am G3 → 15. The method according to Claim 12 wherein the chemical and/or biological challenge is applied to the test site via a patch.

16. The method according to Claim 15 wherein the test site is skin and/or cell cultures derived therefrom. *no close time using patch to culture?*

Am G4 → 17. The method according to Claim 16 wherein the chemical and/or biological challenge comprises applying stool and/or stool analog.

18. The method according to Claim 17 wherein the test site is subject to the primary challenge for up to about 24 hours.

D1 19. A clinical study designed to assess affects of chemicals on preventing and/or treating diaper rash comprising the method according to Claim 16.

Sub 3 20. The clinical study of Claim 17 wherein the test site is an adult's forearm and the primary challenge is stool.